OBSERVATIONS ON THE HATCHING OF SOME FRESHWATER OLIGOCHAETES (NOTE)

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ABSTRACT

Hatching of some freshwater oligochaetes is described.

Many freshwater oligochaetes in New Zealand are sexually mature between spring and summer, and clear to creamy white cocoons are laid in the sediment at this time. Cocoons collected range in size from the large cocoon of the lumbricid, *Eiseniella tetraedra*, (1.75 mm long by 1.25 mm in diameter) to that of an unidentified tubificid (1.1 mm long by 0.7 mm in diameter). All are ovoid with projections on the long axis (Fig. 1).

Small worms develop within the cocoon and when they hatch they possess a reserve of egg yolk. Presence of this yolk is useful for differentiating between juveniles and small adults.

The young of *Tubifex tubifex* wriggle about inside the cocoon until they find the opening in one of the axial projections which they squeeze out through (Fig. 2). The hatching of each *T. tubifex* takes approximately five minutes and the cocoons do not rupture as occurs in *E. tetraedra*. The young of *E. tetraedra* break through the cocoon wall at the base of an axial projection.

ACKNOWLEDGMENT

The line drawings were prepared by Miss R. Conway.

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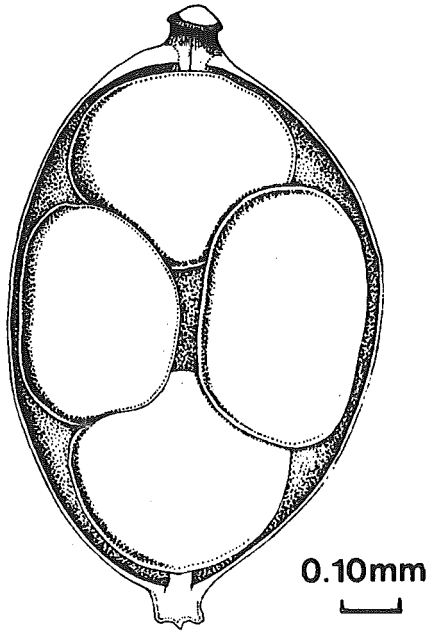

Fig. 1. General shape of a freshwater oligochaete cocoon.

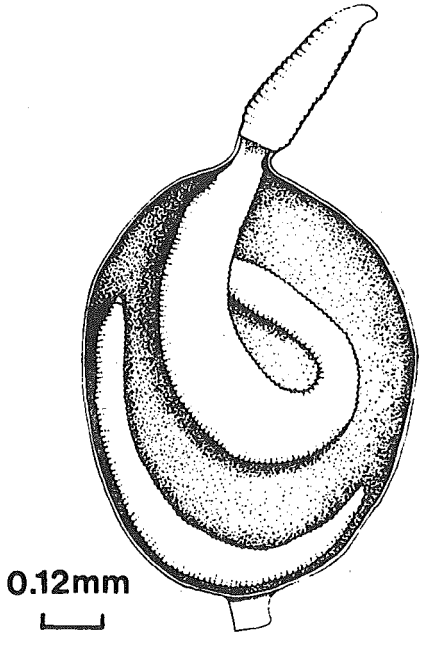

Fig. 2. Young worms hatching from the cocoon of *Tubifex tubifex*.